APPENDIX C

EXTRACT OF STANAG 2002 MARKING OF CONTAMINATED OR DANGEROUS LAND AREAS, COMPLETE EQUIPMENTS, SUPPLIES AND STORES (EDITION 6)

Related documents: STANAG 2019 - Military Symbols.

STANAG 2029 - Method of Describing Ground Locations,

Areas and Boundaries.

STANAG 2036 - Land Minefield Laying, Recording, Reporting

and Marking Procedures,

AIM

1. The aim of this agreement is to standardize those procedures which are to be used by the NATO Forces to mark contaminated or dangerous land areas, complete equipments, supplies and stores.

AGREEMENT

2. Participating nations agree that the procedures contained herein for marking contaminated or dangerous land areas, complete equipments, supplies and stores will be used by the NATO Forces.

PART I - MARTIAL CONTAMINATIONS

GENERAL

- 3. For the purpose of this STANAG, martial contaminations will include such dangers as radiological contamination, biological contamination, chemical contamination, chemical minefields (or barriers), minefields (or barriers) other than chemical, booby-trapped areas and unexploded munitions. These dangers, except where protective minefields are concerned, will always be marked by triangular signs (right-angled isosceles triangle) unless the area is to be abandoned to the enemy. The details of marking protective minefields are described in STANAG 2036.
- 4. The relevant procedures and marking systems are designed both for the protection of personnel of the units responsible for the areas, complete equipments, supplies and stores concerned and for the prevention of casualties or unnecessary exposures among individuals or units of other commands resulting from unknowingly traversing contaminated areas or handling contaminated equipments, supplies or stores.
- 5. The provisions of this agreement do not preclude additional marking or signposting over and above that required by this STANAG when the commander concerned believes it is necessary.

- 1 -

COLOUR OF SIGNS

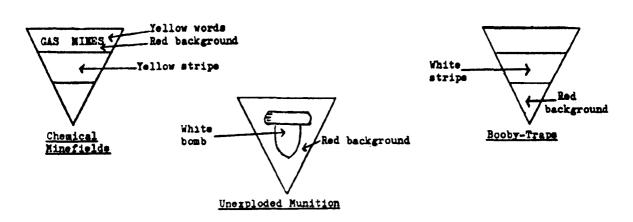
- 6. The nature of the contamination or danger of the considered area is to be indicated by the colours of the signs. These include:
 - a. The primary colour, used for the background of the front surface and for the entire tack surface of the sign.
 - b. A secondary colour, used for additional markings and/or inscriptions on the front surface.

These colours are:

DANCER	PRIMARY COLOUR	SECONDARY COLOURS	
		MARKINGS	INSCRIPTIONS
Radiological contamination	VHITE	none	BLACK
Biological contamination	BLUE	none	RED
Chemical contamination	AETTOA	NONE	RED
Chemical minefields (or barriers)	RED	YELLOW (STRIPE)	YELLOW
Minefields (or barriers) other than chemical	RED	NOME	WHITE
Booby-trapped areas	RED	WHITE (STRIPE)	WHITE
Unexploded munition	RED	WHITE (BCMB)	none

CHEMICAL MINEFIELDS (OR BARRIERS), BOOBY-TRAPS AND UNEXPLODED MUNITIONS

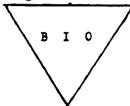
7. In the case of danger due to chemical minefields (or barriers), booby-traps and unexploded munitions, the front surface of the sign which faces away from the dangerous area has two colours and will be marked thus:



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MINEFIELDS (OR BARRIERS) AND BIOLOGICAL, RADIOLOGICAL AND CHEMICAL CONTAMINATIONS

8. In the case of danger due to minefields (or barriers) (other than chemical) and of danger due to biological, chemical and radiological contamination, the primary colour and the pattern of the signs by themselves will be the principal means of recognizing the type of contamination. As a safeguard, the words "MINES", "GAS MINES", "GAS", "BIO", (for biological contamination) or "ATOM", with the optional addition of a symbol such as a trefoil (for radiological contamination) where required by national authorities, will be painted or written with the secondary colour on the frent surface. The language to be used for these inscriptions will be selected by the forces erecting the sign. These inscriptions will be written parallel to the longer side of the sign, for example:



INSCRIPTION OF SIGNS

- 9. In addition, details if known, of biological, chemical and radiological contaminations are to be written on each sign, preferably on the front surface. For biological contamination and for persistent or moderately persistent chemical agents, the name of the agent used, when known, and the date and time of detection are required. In cases of radiological contamination, the following information will be inserted on each sign:
 - a. The dose rate.
 - b. Date and time of reading.
 - c. The date and time of the detonation that produced the contamination (if known).

MULTIPLE HAZARDS

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10. Areas which contain more than one type of contamination or other hazard will be marked with the relevant signs placed near to each other. However, the sign "GAS MINES" will be assumed to include the attendant presence of High Explosive Mines and/or Booby Traps.

MARKING OF PHONEY CONTAMINATED AREAS

11. Marking of phoney contaminated areas (for example, a phoney minefield) shall be exactly the same as for those which are real.

SPECIAL RADIOLOGICAL MARKING PROCEDURES

- 12. The marking of radiologically contaminated areas, complete equipments, supplies and stores merely indicates the presence of a hazard, the extent of which must be determined by newly arrived troops by means of instrument readings, surveys, or information from other units.
- 13. At the discretion of the commander, a radiologically contaminated area need not be marked when a military advantage would be obtained by not doing so. In such cases positive measures will be taken to warn other friendly forces of the existence of the radiologically contaminated area.
- 14. Signs are to be placed on all probable routes leading into contaminat areas at the points where the dose rate reaches 1 rad per hour measured at 1 metre above the ground and on supplies and stores within these areas. When the dose rate is above 1 rad per hour, signs showing the actual dose rate are to be placed on all probable routes leading into the contaminated area at the boundary.
- 15. Lower levels normally are not marked even though significant doses might be produced by long stays in areas of old contamination. Units planning prolonged stays in an area during a nuclear war should check the area with radiac instruments regardless of whether it is marked.
- 16. Signs should be corrected or moved periodically to account for radioactive decay.
- 17. Commands leaving an area or otherwise giving up responsibility for an area are to leave perimeter signs in place. The command taking over responsibility for the area will continue the periodic correction or movement of the signs or remove them when they are no longer necessary.
- 18. Dumps for radiologically contaminated material are to be marked at intervisible intervals around the perimeter.

SIZE AND SHAPE OF SIGNS

- 19. Existing stocks of coloured triangular signs of slightly divergent shapes and sizes will be retained and used until stocks are exhausted.
- 20. The triangle will be a right-angled isosceles triangle.
- 21. The base of the triangle will be approximately 28 cm (11 $\frac{1}{2}$ ins) and the opposite sides will be approximately 20 cm (8 ins).
- 22. Triangles will be made of metal, wood, plastic, composition board, or any other adequate material available.

PLACING OF SIGNS

23. Signs will be placed above the ground, right-angled apex downwards on wire boundary fences, trees, rocks, poles or by putting the apex into the ground. This latter method should not be used if the other methods can be adopted as the signs might well be obscured by grass and other undergrowth. Further, they can be readily knocked down. The front

side of the signs is to be posted facing away from the area being marked In those cases where signs are posted within a contaminated area, the sign is to face away from the area of higher dose rate, or higher concentration if such can be determined.

SIGNS FOR COMPLETE EQUIPMENTS, SUPPLIES AND STORES

24. At least one sign will be placed centrally on one side of a complete equipment or unit load pallet right-angled apex downwards. Non-palletized stores will be marked in the most obvious and convenient position.

NIGHT SIGNING

25. No standardization of lighting of signs is specified. Each army will provide lighting or reflecting devices where deemed necessary.

PART II - NON-MARTIAL CONTAMINATIONS

- 26. Non-martial contamination consists of that contamination resulting from latrines, garbage, soakage and refuse. These forms of contaminations will always be marked by rectangular signs which may be of any colcur and any convenient size.
- 27. When closed, earth mounds will be placed on top of non-martial contaminations and the rectangular sign will be placed on the top of the mound. The sign will indicate the type of pit, the date closed and, in non-operational areas, the unit designation.

IMPLEMENTATION OF THE AGREEMENT

28. This STANAG will be considered to have been implemented when the necessary orders/instructions putting the procedures detailed in this agreement into effect have been issued for the forces concerned.